WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

a) the nucleotide sequence as set forth in Figure 1A (SEQ ID NO: 1);

b) the nucleotide sequence encoding the polypeptide from residues 1-200 or from residues 21-200 as set forth in Figure 1A (SEQ ID NO: 1);

c) a nucleotide sequence encoding a polypeptide that is at least about 70 percent identical to the polypeptide as set forth in Figure 1A (SEQ ID NO: 1);

d) a naturally occurring allelic variant or alternate splice variant of any of (a), (b) or (c );

e) a nucleotide sequence complementary to any of (a), (b) or (c );

f) a nucleotide sequence of (b),(c ) or (d) encoding a polypeptide fragment of at least about 25, 50, 75, 100, or greater than 100 amino acid residues;

g) a nucleotide sequence of (a), (b) or (c ) comprising a fragment of at least about 10, 15, 20, 25, 50, 75, 100, or greater than 100 nucleotides; and

h) a nucleotide sequence which hybridizes under stringent conditions to any of (a)-(g).

2. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

a) the nucleotide sequence as set forth in Figure 2A (SEQ ID NO: 11) or Figure 3A (SEQ ID NO: 6) or Figure 12A (SEQ ID NO: 16);

b) the nucleotide sequence encoding the polypeptide as set forth in Figure 2A (SEQ ID NO: 6) from residues 1-322 or from residues 47-322, or as set

forth in Figure 3A (SEQ ID NO: 11) from residues 1-288 or from residues 19-288, 20-288, 21-288, 22-288, 24-288, or 28-288 or as set forth in Figure 12A from residues 1-302, or from residues 19-302, 20-302, 21-302, 22-302, 24-302 or 28-302;

c) a nucleotide sequence encoding a polypeptide that is at least about 70 percent identical to the polypeptide as set forth in Figure 2A (SEQ ID NO: 6) or Figure 3A (SEQ ID NO: 11) or Figure 12A (SEQ ID NO: 6);

d) a naturally occurring allelic variant or alternate splice variant of any of (a), (b) or (c );

e) a nucleotide sequence complementary to any of (a), (b) or (c );

f) a nucleotide sequence of (b),(c ) or (d) encoding a polypeptide fragment of at least about 25, 50, 75, 100, or greater than 100 amino acid residues;

g) a nucleotide sequence of (a), (b) or (c ) comprising a fragment of at least about 10, 15, 20, 25, 50, 75, 100, or greater than 100 nucleotides; and

h) a nucleotide sequence which hybridizes under stringent conditions ~~to any of (a)-(g)~~.

3. The nucleic acid molecule of Claims 1 or 2 wherein the nucleotide sequence is operably linked to an expression control sequence.

4. A host cell comprising the nucleic acid molecule of Claim 2.

5. The host cell of Claim 3 which is a eucaryotic cell.

6. The host cell of Claim 3 which is a procaryotic cell.

7. A process for producing a polypeptide comprising growing a culture of the host cell of Claim 3 in suitable culture medium and isolating the polypeptide from the culture.

8. A polypeptide produced by the process of Claim 7.

9. A polypeptide encoded by the nucleic acid molecule of Claim 1.

10. A polypeptide encoded by the nucleic acid molecule of Claim 2.

11. An isolated polypeptide comprising the amino acid sequence selected from the group consisting of:

a) the amino acid sequence as set forth in Figure 1A (SEQ ID NO: 2);

b) the mature amino acid sequence as set forth in Figure 1A (SEQ ID NO: 2) comprising a mature amino terminus at residue 21;

c) a fragment of the amino acid sequence set forth in Figure 1A (SEQ ID NO: 2) comprising at least about 25, 50, 75, 100, or greater than 100 amino acid residues;

d) an ortholog of (a), (b) or (c ); and

e) an allelic variant or alternative splice variant of (a), (b), (c) or (d).

12. An isolated polypeptide comprising the amino acid sequence selected from the group consisting of:

a) the amino acid sequence as set forth in Figure 2A (SEQ ID NO: 7) or Figure 3A (SEQ ID NO: 12) or Figure 12A (SEQ ID NO: 17);

b) the mature amino acid sequence as set forth in Figure 2A (SEQ ID NO: 7) comprising a mature

amino terminus at residues 47, or Figure 3A (SEQ ID NO: 12) comprising a mature amino terminus at any of residues 19, 20, 21, 22, 24 or 28, or Figure 12A (SEQ ID NO: 17) comprising a mature amino terminus at any of residues 19,20,21,22,24,or 28;

c) a fragment of the amino acid sequence set forth in Figure 2A (SEQ ID NO: 7) or Figure 3A (SEQ ID NO: 12) or Figure 12A (SEQ ID NO: 17) comprising at least about 25, 50, 75, 100, or greater than 100 amino acid residues;

d) an ortholog of (a), (b) or (c ); and

e) an allelic variant or alternative splice variant of (a), (b), (c) or (d).

13. An antibody or fragment thereof specifically binding the polypeptide of Claims 9, 10, 11 or 12.

14. The antibody of Claim 11 which is a monoclonal antibody.

15. The antibody of Claim 13 which is a human antibody.

16. The antibody of Claim 13 which is a humanized or CDR-grafted antibody.

17. The antibody or fragment of Claim 13 which binds B7RP1 or to a B7RP1 extracellular domain.

18. The antibody or fragment of Claim 13 which inhibits the binding of B7RP1 to CRP1.

19. A composition comprising the polypeptide of Claims 9, 10, 11 or 12 and a pharmaceutically acceptable carrier, adjuvant, solubilizer, stabilizer or anti-oxidant.

20. A polypeptide comprising a derivative of the polypeptide of Claims 9, 10, 11 or 12.

21. The polypeptide of Claim 20 which is covalently modified with a water-soluble polymer.

22. A fusion polypeptide comprising the polypeptide of Claims 9, 10, 11 or 12 fused to a heterologous amino acid sequence.

23. The fusion polypeptide of Claim 22 wherein the heterologous amino acid sequence is an IgG constant domain or fragment thereof.

24. A method for treating, preventing or ameliorating a T-cell mediated disorder comprising administering to an animal the polypeptide of Claims 9, 10, 11 or 12.

25. A method of diagnosing a T-cell mediated disorder or a susceptibility to a T-cell mediated disorder in an animal comprising:

a) determining the presence or amount of expression of the polypeptide of Claims 9, 10, 11 or 12; and

b) diagnosing a T-cell mediated disorder or a susceptibility to a T-cell mediated disorder based on the presence or amount of expression of the polypeptide.

26. A method of identifying a test molecule which binds to a polypeptide comprising:

a) contacting the polypeptide of Claims 9, 10, 11 or 12 with a test molecule; and

b) determining the extent of binding of the polypeptide to the test molecule.

27. The method of Claim 26 further comprising determining the activity of the polypeptide when bound to the compound.

28. A method of regulating T-cell activation or proliferation in an animal comprising administering to the animal the nucleic acid molecule of Claims 1, 2 or 3.

29. A transgenic non-human mammal comprising the nucleic acid molecule of Claim 3.

30. A method of suppressing an immune response in an animal comprising administering to the animal an antagonist of CRP1 or B7RP1.

31. The method of Claim 30 wherein the antagonist is an antibody which binds B7RP1.

32. A method of decreasing IgE production in an animal comprising administering a B7RP1 antagonist or a CRP1 antagonist, or a combination thereof, in an amount effective to decrease IgE production.

33. A method of preventing or treating an IgE-mediated disorder comprising administering a therapeutically effective amount of a B7RP1 antagonist, or a CRP1 antagonist, or a combination thereof.

34. The method of Claims 32 or 33 wherein the B7RP1 antagonist is an antibody which binds B7RP1 and partially or completely inhibits IgE production.

35. The method of Claims 32 or 33 wherein the CRP1 antagonist is an antibody which binds CRP1 and partially or completely inhibits IgE production.

36. The method of Claim 33 wherein the IgE-mediated disorder is asthma or an allergic disorder.

37. The method of Claims 32 or 33 further comprising administering an IgE antagonist.

38. The method of Claim 37 wherein the IgE antagonist is an anti-IgE antibody.

39. A method of enhancing an immune response comprising administering B7RP1, a B7RP1 agonist or a CRP1 agonist.

40. The method of Claim 39 further comprising administering a CD28 agonist.

41. The method of claim 39 further comprising administering B7.1 or B7.2 or both.

42. A method of treating cancer or viral infection comprising administering B7RP1 or an agonist of CRP1, optionally in combination with B7.1 or B7.2.

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